Rheumatology revision

Enumerate :

1. **Diagnostic criteria of rheumatoid arthritis.**
2. **Diagnostic criteria of SLE.** 2 rash , 2 Lab , 7 P
3. **Immune abnormalities in Rheumatoid arthritis** 👌
    - Rheumatoid factor : 80%
    - ANA : present in some cases, not specific.
    - Anti-CCP : highly specific and sensitive for RA.
4. **Causes of purpura in a patient with connective tissue disease.**
    - Vasculitis.
    - Cortisone therapy.
    - NSAIDs : platelets dysfunction.
    - Thrombocytopenia : immune mechanism.
    - Amyloidosis.
    - Factor VIII antibodies : SLE, RA.
5. **Causes of gout.**
6. **Complications of corticosteroids.**
7. **Complications of NSAIDs.**
8. **Uses of chloroquin.**
9. **Uses of penicillamine.** ♫ ♫ ليه استخدامين penicillamine ال
    - RA.
    - Wilson disease.

10. Side effect of aspirin.

- **A**plastic anemia & hemolytic anemia.
- **S**kin rash , salt & water retention.
- **P**eptic ulcer, Bleeding (inhibition of platelet aggregation).
- **R**espiratory : induce bronchial asthma.
- **I**rritation of GIT : nausea, vomiting.
- **N**ephrotoxicity.

11. Uses of methotrexate in rheumatic diseases.

- Rheumatoid arthritis.
- Juvenil RA.
- Felty's syndrome.
- Psoriatic arthritis.
- Dermatomyositis.
- SLE.
- Still's disease in adult.
- Wegener's granulomatosis.
- Takayasu's arteritis.

12. Side effects of methotrexate.

- Anemia : folic acid deficiency MCQ
- **B**one marrow failure.
- He**p**atotoxicity.
- **P**ruritus.
- **P**hotosensitivity.
- **p**igmentations.
- **P**ulmonary fibrosis & interstitial **p**neumonia.

13. **Precautions of methotrexate in a patient with RA.**
    - Methotrexate for treatment of rheumatoid arthritis should be used on a special dosing regimen requiring rest period. (initial dose is 7.5 to 15 mg once weekly that can be increased by 2.5mg/w every month until symptoms & signs improved or maximum of 30mg/w is reached)
    - Patients on methotrexate therapy require regular monitoring to screen for serious complications e.g. CBC , Liver & renal function tests, …
    - The tests are repeated approximately every six weeks so that problems can be detected early.
    - There is a small risk of pneumonitis with methotrexate. Patients should report any persistent dry cough to their doctors immediately. X-rays may be required.
    - Caution should be used when NSAIDs and penicillin are administered concomitantly with methotrexate. These drugs may enhance its toxicity.
    - Avoid alcohol.
    - Avoid sun exposure and use high level sunscreen to prevent severe sunburn due to increased sun sensitivity.
    - Since methotrexate reduces immune function, precaution should be taken to avoid all kinds of infection.
    - Certain side effects such as mouth sores may be reduced by folate supplementation with methotrexate.
14. **Joint deformities in rheumatoid arthritis.**
15. **Extra-articular manifestations of rheumatoid arthritis.**
16. **Extra-articular manifestations of SLE.**

17. Causes/risk factors of osteoporosis.

- Genetic factor : the single most significant factor.
- ↓ hormones : Estrogen deficiency in females, hypogonadism in males.
- ↑ hormones : Cushing, thyrotoxicosis, hyperparathyroidism.
- Drugs : cortisone, heparin, anticonvulsant, chemotherapeutics.
- Prolonged immobilization.
- Smoking & alcohol intake.
- Others : Inflammatory bowel disease, Chronic liver disease, Malabsorption.

18. Factors associated with poor prognosis of rheumatoid arthritis*

- Acute polyarthritis onset.
- Male patient.
- Extra-articular manifestations.
- Functional disability at one year after start of disease.
- High value of RF (in absence of HCV infection)
- Presence of HLA-DR4
- Radiographic evidence of erosions within 3 years of onset of disease.

19. Extra-skeletal manifestations of Ankylosing spondylitis.

- **A**nterior uveitis.
- **A**ortic regurge.
- **A**pical pulmonary fibrosis.
- **A**myloidosis.
- **A**tlantoaxial sublaxation ⇨ spinal cord compression.

20. Classification of lupus nephritis.

I. Normal glomeruli.

II. Mesangial affection

III. Focal proliferative GN.

IV. Diffuse proliferative GN.

V. Membranous GN

VI. Sclerosing GN.

21. Causes of chronic polyarthritis. (> 6 weeks)

- Rheumatoid arthritis.
- **S**LE.
- **S**ystemic sclerosis.
- **S**ero -ve arthropathy e.g. Reiter's syndrome, Psoriatic arthropathy.
- **S**arcoidosis.
- **C**hronic gout.
- Polymyo**s**itis.
- O**s**teoarthritis.
- Va**s**culitis.

22. Causes of acute polyarthritis*

- Acute rheumatic fever.
- Bacterial endocarditis.
- Rheumatoid arthritis : 10% of cases.
- SLE.
- Reiter's syndrome, psoriatic arthritis.
- Viral infection : rubella, hepatitis B, HIV, Epstein-Barr.

23. Causes of monoarthritis. See P36

24. Causes of low back pain.

- Mechanical : Disc prolapsed , Trauma , Lumbar spondylopathy
- Inflammatory : sero-ve arthropathy e.g. ankylosing spondylitis.
- Infections : brucellosis , osteomyelitis, abscess.
- Neoplasm : Metastasis , Primary tumor.
- Referred : Colonic tumors , renal colic , abdominal aorta.

25. Arthritis with diarrhea.

- Reactive arthritis.
- Colitic arthritis.

26. Constitutional symptoms may be seen in RA. See P6

27. Types (*variants*) of scleroderma = scleroderma like conditions. P30

28. Risk factors of amyloidosis.*

- Age : > 50
- Chronic infection or inflammatory disease as RA , FMF
- Family history.
- Multiple myeloma , Hodgkin's disease.
- Kidney disease that has required dialysis for more than 5 years.

29. Precipitating factors of acute gouty arthritis.*

- Excess protein.
- Alcohol.
- Drugs e.g. thiazide, lasix.
- Surgery.
- Trauma.
- Dehydration.

30. Causes of hypouricemia.

Pregnancy, Fanconi syndrome, Drugs e.g. allopurinol.

31. Causes of secondary osteoarthritis.*

- Congenital : hip dislocation.
- Endocrinal : **A**cromegaly, **m**yxedema, hyperparathyroidism, DM
- Metabolic : hemochromatosis.
- Others : end of any inflammatory or infectious disease.

32. Causes of knee pain.

I. Intraarticular :
   - Inflammatory : RA, sero-ve arthropathy, pseudogout
   - Septic arthritis.
   - Osteoarthritis.

II. Extraarticular : Fractures, tumors, trauma, tendonitis.

III. Referred pain : Hip, lumbosacral spine.

33. Causes of neck pain.

- Osteoarthritis.
- Ankylosing spondylitis.
- Polymyalgia rheumatic.
- Referred : coronary heart disease.
- Cervical spondylosis.
- RA.

34. Clinical triad of Reiter's syndrome. **AUC**

Arthritis, **U**rethritis, **C**onjunctivitis, following an infectious dysentery.

(Can't see, can't pee, can't climb the tree).

35. Telescope deformity.

It's due to substantial absorption of metacarpal and phalangeal bone ends. Involved fingers may be extended or shortened as the telescope.

GIVE A SHORT ACCOUNT ON :

1. **Articular manifestations of rheumatoid arthritis.**
2. **Extra-articular manifestations of rheumatoid arthritis.**
3. **Investigation of rheumatoid arthritis.**
4. **Treatment of rheumatoid arthritis.**
5. **DMARDs**

- Group of drugs used in systemic rheumatic disease aiming for minimizing disease activity & progression.
- These drugs are slow acting drugs (their effect takes 4-8 weeks to appear).
- Should be used as early as possible to induce remission & avoid erosive changes.
- Regular monitoring of toxicity is mandatory.
- Mechanism of action : exact mechanism is unknown
    a. Inhibition of lysosomal enzymes.
    b. Inhibition of phagocytosis.
    c. Inhibition of prostaglandins.
    d. Inhibitory effects on the immune system.
    e. Some has antimicrobial activity (e.g. sulfasalazine)

i- ***Gold salts*** **:** *(Na aurothiomalate)*

- Dose : 50 mg/week IM for about 20 weeks (Total dose :1000 mg)
- SE : DHP ☺
    - **D**epression of bone marrow, **D**ermatitis.
    - **H**ypersensitivity.
    - **P**roteinuria.
- Precaution :
    - Stop if proteinuria > 2g /24h
    - Stop if WBCs < 3000 or platelets < 100000

ii- ***Penicillamine*** *:* ↓↓ RF

- Dose : 250 mg/d
- Response : within 4-6 months.
- SE : As Gold + SLE.

iii- ***Chloroquine*** *:*

- Dose : 250 mg/d
- Response : Within 4-6 months.
- SE : 👁 Retinopathy, **C**orneal opacity NOT Cataract , Skin rash.
- Precaution : Request fundus examination before use & every 6 months.

iv- ***Immunosuppressive drugs*** : see rheumatology book .

v- ***Sulfasalazine*** :

- Mode of action : antifolate.
- Dose : 0.5 - 1 gm/d then increase to 2-3 gm/d over few weeks.
- Side effects : headache, skin rash, GIT irritation, leucopenia, reversible depression of sperm count.

vi- ***Biologic agents*** : see rheumatology book.

6. **Differential diagnosis of rheumatoid arthritis.** = DD of polyarthropathy

History & examination are often helpful in narrowing the differential diagnosis e.g.

SLE :

- May have the similar distribution of joint involvement but rarely erosive.
- Clinical manifestations & serological finding are helpful in establishing the diagnosis .....

Sero-ve spondylopathy :

- Asymmetrical joint involvement.
- Central joints > peripheral joints.
- RF : -ve

Osteoarthritis :

- Absence of systemic inflammatory manifestations
- Onset in later life.
- Pain : ↑ by exercise , ↓ by rest.
- Common joints involved are : Knee, Hips, spine , DIP, PIP , 1st metatarsophalangeal & 1st carpometacarpal joints.
- Normal lab finding & normal ESR.

Chronic gout :

- Early in the course of the disease is monarticular, especially the first metatarsophalangeal joint of the big toe, then tarsal, ankles, knees, wrists and fingers.

Viral infections :

- May result in a polyarthritis clinically mimic RA.
- Skin rash, self limited course.
- It is important to exclude chronic hepatitis & HIV.

7. Clinical picture , investigations, medical treatment of ankylosing spondylitis.

- Clinical picture : ♂ : ♀ = 3 : 1 ☹

a) Arthritis :

- Back pain & stiffness : improved with movement.
- Sacroiliac joints tenderness.
- Decreased spinal mobility.

b) Enthesitis : e.g. Achilles enthesitis.

c) Extraskletal manifestations : 5 A see rheumatology book…wait see above.

- Investigations : Lab , X ray (see book)

Medical ttt :

- NSAIDs
- TNF blockers.
- Sulphasalazine, methotrexate : effective in a case of peripheral joints not axial spine.
- Cortisone (local injection). Oral cortisone has no role.

8. **Sero -ve spondyloarthropathies.**
9. **Clinical picture, investigations, treatment of SLE.**
10. **Causes, clinical picture, investigations & treatment of osteoarthritis.**
11. **Causes, management of osteoporosis.**
12. **Etiology of gout.**
13. **Complications of gout.**
14. **Treatment of acute gouty arthritis.**
15. **Treatment of chronic gout.**
16. **Clinical features of vasculitic syndromes.**
17. **Differential diagnosis of monoarthropathy.**
18. **Differential diagnosis of polyarthropathy.**
19. **Differential diagnosis of arthritis of small joints of the hand.** See p37
20. **Differential diagnosis of acute polyarthropathy.**
21. **Differentiate between inflammatory & non-inflammatory arthropathy.** See rheumatology book P 36
22. **Differentiate between acute & chronic gouty arthritis.**

23. Differentiate between rheumatic & rheumatoid arthritis.

	Rheumatic fever	Rheumatoid arthritis
Etiology	Post-streptococcal pharyngitis	Autoimmune disease
Coarse	< 6 weeks	> 6 weeks
Articular manifestations	Big joints Not erosive	Small joints. Erosive
Extra-articular manifestations	……	……
Investigations	…….	…….
Treatment	✍ Penicillin for pharyngitis ✍ Aspirin for Arthritis. ✍ Cortisone for Carditis.	…….

24. Differentiate between Reiter's & Behcet's syndrome.

	Reiter's syndrome	Behcet's syndrome
Male : Female ratio	10 - 1	2 - 1
Ulcers	Painless	Painful
Eye	Conjunctivitis	Uveitis
Spondylitis & Sacroilitis	Frequent	Uncommon
HLA	B27	B27, B5
Role of infection	Play a big role	No role
Treatment	NSAIDs	Immunosuppressive

25. Define reactive arthritis.

Reactive arthritis, one of the seronegative spondyloarthropathies, caused by an infection , but not a direct infection of the synovial space (viable micro organisms CAN NOT be cultured). Incidence is increased in HLA B27 positive individual e.g. Reitter's syndrome.

26. Define arthralgia.

Joint pain without inflammation.

27. Define Osteomalacia.

Soft bones in adults, due to inadequate mineralization of bone, due to defect in vitamin D availability or metabolism.

28. Define Familial Mediterranean fever.

- FMF is an intermittent febrile disorder with inflammatory serositis, arthritis, and rash.
- It is an autosomal recessive disorder, the genetic defect is in the gene MEFV, localized in chromosome 16.

29. Define Cryoglobulinemia.

- Cryoglobulins are circulating immunoglobulins which precipitate in the cold & often associated with hepatitis C infection.
- Typical clinical features include : palpable purpura, urticaria & arthralgia. Less common features include Raunaud's , GN, neuropathy& lymphadenopathy.

Cases

1- 23 year old female , red rash on her face, fever, arthralgia, edema LL , Bp 200/110, CBC: anemia with +ve coomb test & leucopenia. Cardiac examination : pericardial rub. She is on steroid therapy.

Admission to ICU with coma and convulsions.

a) Explain changes in CBC.

b) Explain causes of coma.

c) Mention other diagnostic tests needed.

d) Mention outline therapy.

a) Explain changes in CBC.

Anemia: auto-immune hemolytic anemia (+ve coomb's test) as SLE is an auto-immune disease.

Leucopenia:

1. Antibody mediated:

- ✓ Anti-neutrophils antibodies
- ✓ Anti-lymphocytes antibodies
- ✓ Anti Ro antibodies

2. Drug induced.

b) Explain causes of coma.

May be due to diffuse cerebritis, vasculopathy, thrombosis or infection.

c) Mention other diagnostic tests needed. See Rheumatology book P 23

d) Mention outline therapy. See Rheumatology book P 24

2- A 52-year-old man comes to the emergency room complaining of pain in his big toe. He was well until 5:00 this morning, when he was awakened by an aching pain in his right great toe. Within a few hours, the joint was dusky red and hot, and was tender. By 8:00 a.m., The patient describes feeling feverish without rigors or chills. There is no history of trauma to the foot, nor is there a family history of arthritis or similar attacks. He is taking hydrochlorothiazide for control of hypertension.

On physical examination, the patient is found to be overweight. His blood pressure is 170/100 mm Hg, his pulse is 90 beats per minute and regular, and his temperature is 38°C . Skin examination shows no lesions or nodules. On examination of his joints, all show a normal range of motion without synovitis or deformity, except for the right first MTP joint, which shows synovitis, warmth, tenderness, and erythema at the base of the toe.

The following laboratory values are reported: white blood cell count 12,500 cells/mm^3, uric acid 9.0 mg/dL; creatinine 1.0 mg/dL. Urinalysis reveals no red blood cells or protein. A radiographic study of the right foot discloses soft tissue swelling around the right first MTP joint, but no erosions.

a) How is the diagnosis of gout established?
b) What are the four reversible secondary causes of hyperuricemia?
c) In this patient, give 2 risk factors of acute gouty arthritis?
d) What are the appropriate therapies for an acute attack of gout and chronic symptomatic hyperuricemia?

a) **How is the diagnosis of gout established?**

- The diagnosis of gout requires aspiration of synovial fluid or a tophus for crystal analysis (Monosodium urate crystals).
- In gout, synovial fluid is inflammatory (typically 20,000 to 100,000 leukocytes/mm^3).

- The synovial fluid should be sent for Gram's stain and culture as in rare cases, septic joint fluids can contain monosodium urate crystals.
- Elevated serum uric acid levels are not diagnostic of gout as many individuals have asymptomatic hyperuricemia and never develop gout.

b) What are the four reversible secondary causes of hyperuricemia?

The reversible secondary causes of hyperuricemia include :

- Alcohol consumption.
- Diet : containing purine-rich foods e.g. meats.
- Drugs : that decrease the renal excretion of uric acid (cyclosporine, diuretics, pyrazinamide…).
- Obesity (weight loss can improve hyperuricemia).

c) In this patient, give 2 risk factors of acute gouty arthritis?

- Diuretic intake.
- Obesity.

d) What are the appropriate therapies for an acute attack of gout and chronic symptomatic hyperuricemia? See gout

3- A 50-year-old woman has had Raynaud's phenomenon of the hands for 15 years. The condition has become worse during the last year, and she has developed arthralgias and arthritis involving the hands and wrists as well as mild sclerodactyly and difficulty swallowing solid foods. Laboratory studies reveal a positive serum antinuclear antibody. Anticentromere antibodies are present in high titers; antiribonucleoprotein antibodies are not detectable.

a) What is the most likely diagnosis ?
b) What is the treatment of Raynaud's phenomenon ?*
c) Raynaud's phenomenon may occur in association with what four rheumatic diseases ?

a) What is the most likely diagnosis ?

Limited scleroderma (CREST syndrome) : calcinosis, Raynaud's phenomenon, esophageal dysmotility, sclerodactyly, and telangiectasia.

b) What is the treatment of Raynaud's phenomenon ?*

Raynaud's phenomenon may be controlled by :

- Ca channel blockers (nifedipine).
- α blockers.
- 5-phosphodiasterase inhibitors (sildenafil)
- Topical nitroglycerine and IV prostaglandin.
- Low dose aspirin may has a role as adjuvant therapy : prevent platelet aggregation.
- Digital sympathectomy in severe cases.

c) Raynaud's phenomenon may occur in association with what four rheumatic diseases?

Raynaud's phenomenon may be seen in the settings of scleroderma (90%), MCTD (70%), SLE (20%), or polymyositis/dermatomyositis (20%). When the phenomenon occurs alone, without an associated CTD, it is called Raynaud's disease.

4- A 38-year-old woman is seen because of pain and swelling in the joints of her hands, as well as in her wrists, elbows, and knees. Her symptoms have been intermittent over the last 8 months but have worsened recently and become more prolonged. The pain and swelling have been accompanied by hand stiffness in the morning, frequently lasting for 2 hours or more, and she has noted return of the stiffness later in the day after periods of inactivity. She also complains of progressively worsening fatigue and lack of energy. She denies rash, photosensitivity, alopecia, oral ulcers, or symptoms of Raynaud's phenomenon. On physical examination, swelling, warmth, and tenderness are noted in several MCP and PIP joints bilaterally. Small effusions are present in both knees. Tenderness is elicited over several MTP joints in both feet. Examination of the skin reveals the presence of several subcutaneous nodules over the proximal extensor aspects of both forearms.

a) What is the primary pathophysiologic process in RA?

See rheumatology book p 6

b) What are four characteristic radiographic findings in RA, and what are the mechanisms responsible for their development?

i. Soft tissue swelling : is due to the inflamed, proliferative synovitis.
ii. Joint space narrowing results from the loss of articular cartilage.
iii. Periarticular osteopenia : is due to the loss of calcium in bones surrounding the inflammatory arthritis and results from the effects of prostaglandins, IL-1, and TNF which are released by the inflamed synovium.
iv. Marginal erosions are produced by the proliferative synovitis.

Rheumatology MCQ

1- Rheumatoid factor in SLE is positive in :

a. 20 %
b. 35 %
c. 50 %
d. 70 %

2- Which is the specific antibody for SLE

a. Anti Ro/La
b. Anti-RNP
c. Anti-ss DNA
d. Anti-Sm

3- Extra-articular manifestations of rheumatoid arthritis include EXCEPT

a. Cutaneous ulceration
b. Pericardial & pleural effusion
c. Amyloidosis
d. Anterior uveitis

4- ANA in SLE is positive in approximately

a. 60 %
b. 75 %
c. 80 %
d. 95 %

5- Which is NOT used to treat acute gouty arthritis

a. Etoricoxib
b. Allopurinol
c. Colchicine
d. Prednisolone

6- Which is NOT regarded as a small vessel vasculitis

a. Microscopic polyangiitis
b. Henoch-Schonlein purpura
c. Polyarteritis nodosa
d. Essential mixed cryoglobulinemia.

7- Which of the following usually presents as monoarthropathy

a. SLE
b. Rheumatoid arthritis
c. Gout
d. Sjogren's syndrome

8- Metacarpophalangeal joints are usually NOT affected in

a. Osteoarthritis
b. Rheumatoid arthritis
c. Ankylosing spondylitis
d. Reactive arthritis

9- Brucella arthritis commonly affects

a. Knee joint
b. Joints of hands
c. Spine
d. Metatarsophalangeal joint

10- CREST syndrome is aggregation of Calcinosis , Raynaud's , Sclerodactyly , Telangiectasia and

a. Edema
b. Esophageal hypomotility
c. Endomyocardial fibrosis
d. Exophthalmos

11- Felty's syndrome doesn't include :

a. Rheumatoid arthritis.
b. Splenomegally.
c. Hepatomegally.
d. Pancytopenia.

12- CREST syndrome is diagnosed by presence of

a. Anti-RNP antibody
b. Anti-centromere antibody
c. Anti-Jo-1 antibody
d. Anti-histone antibody

13- Which is false as regard to ARA criteria of rheumatoid arthritis

a. Rheumatoid nodules
b. Morning stiffness > 1 hour
c. Asymmetrical arthritis
d. Arthritis of hand joints

14- In rheumatoid arthritis , rheumatoid factor is formed against

a. IgG
b. IgM
c. IgA
d. IgD

15- Commonest metabolic bone disease is

a. Osteoarthritis
b. Rickets
c. Osteoporosis
d. Osteomalacia

16- Recurrent anterior uveitis is most characteristic of

a. Behcet's syndrome
b. SLE
c. Rheumatoid arthritis
d. Sjogren's syndrome

17 - Hydroxychloroquine toxicity <u>does not</u> produce

a. Maculopathy
b. Corneal deposits
c. Optic atrophy
d. Cataract

18- Rheumatoid arthritis is strongly associated with HLA

a. DR3
b. DR4
c. B27
d. B8

19 - A 22 years woman has repeated attacks of myalagia , arthralagia , pericarditis and pleural effusion for few years. The laboratory screening test should be

a. Rose Waaler agglutination test
b. ANA
c. ASO titre
d. CD4 lymphocyte count.

20 - Esophagus is most commonly involved by

a. Progressive systemic sclerosis
b. Polymyositis
c. Polyarteritis nodosa
d. Behcet's syndrome

21- The dose of methotrexate in treatment of rheumatoid arthritis :

a. 200 – 400 mg/day
b. 200 – 400 mg/week
c. 7.5 mg/day
d. 7.5 mg/week

22- HLA B27 tissue typing is NOT associated with

a. Psoriatic arthropathy
b. Ankylosing spondylitis
c. Reiter's syndrome
d. Behcet's syndrome

23- The most common rheumatological disease is :

a. Osteoarthritis
b. Rheumatoid arthritis.
c. Gout
d. SLE

24- Drug induced SLE is NOT commonly associated with

a. Polyarthritis
b. Pulmonary infiltrates
c. Renal involvement
d. Polyserositis

25- Bouchard's node in osteoarthritis is seen in

a. Carpo-metacarpal joint
b. Metacarpo-phalangeal joint
c. Proximal interphalangeal joint
d. Distal interphalangeal joint

26- Rheumatoid nodules are characterized by all EXCEPT

a. Big
b. Tender
c. Fixed to skin
d. Ulcerate

27- Ocular manifestations of rheumatoid arthritis usually do not include

a. Anterior uveitis
b. Episcleritis
c. Scleromalacia
d. Keratoconjunctivitis sicca

28- Drug of choice for relieving pain in osteoarthritis is

a. Cortisone
b. Ibuprofen
c. Paracetamol
d. Diclofenac

29- Pseudogout is associated with deposition of crystals of

a. Calcium oxalate
b. Calcium phosphate
c. Calcium pyrophosphate dehydrate
d. Monosodium urate

30- All of the following indicate poor prognosis in rheumatoid arthritis EXCEPT

a. High titre of rheumatoid factor
b. Extra-articular manifestations
c. Acute onset of disease
d. Early development of nodules

31- In Churg-Struss syndrome , the principle organ involved is

a. Lung
b. Kidney
c. Central nervous system
d. Liver

32- Kawasaki disease is associated with

a. Coronary artery aneurysm
b. Renal failure
c. Pleural effusion
d. Polyarteritis nodosa

33- Which organ is NOT included in classic Wegner's granulomatosis

a. Lung
b. Kidney
c. Heart
d. Nose

34- c-ANCA is diagnostic of

a. Polyarteritis nodosa
b. Microscopic polyarteritis
c. Wegner's granulomatosis
d. Crescentic GN

35- HBsAg is present in vasculitis associated with

a. Henoch-Schonlein purpura
b. Temporal arteritis
c. Churg-Struss syndrome
d. Polyarteritis nodosa

36- Colchicine may be used in all EXCEPT

a. Scleroderma
b. Chronic gout
c. Myelofibrosis
d. Primary biliary cirrhosis

37- Which of the following is NOT considered as a diagnostic criteria of SLE

a. Painless oral ulcers
b. Photosensitivity
c. Alopecia
d. Positive ANA

38- Boutonniere deformity is

a. Extended distal & flexed proximal interphalangeal joints
b. Flexed distal & extended proximal interphalangeal joints
c. Flexed distal & proximal interphalangeal joints
d. Extended distal & proximal interphalangeal joint

39- A 64 years old man presents with a vasculitic skin rash , a peripheral neuropathy and gastrointestinal blood loss. He is found to have proteinuria on dipstick urinalysis. Which one of the following is the most likely diagnosis ?

a. Microscopic polyangiitis.
b. Wegener's granulomatosis.
c. Henoch-Schonlein vasculitis.
d. Polyarteritis nodosa.

40- Which one of the following would be characteristic of the laboratory findings in a patient with antiphospholipid syndrome?

a. Low C3 and C4 concentrations.
b. Positive anticardiolipin antibodies.
c. Prolonged INR.
d. Elevated LDL.

41- Which of the following is often associated with low uric acid levels ?

a. Thiazide diuretic therapy.
b. Alcoholism.
c. Polycythemia rubra vera.
d. Eclampsia of pregnancy.

42 - A 58 year old women who has had Sjogran's syndrome for ten years presents with enlarged cervical lymph nodes. Which one of the following is the most likely neoplasm responsible for this presentation?

a. Gastric carcinoma.
b. Lymphoma.
c. Bronchial carcinoma.
d. Chronic lymphatic leukemia.

43- Presentation with acute monoartheritis suggests the possibility of <u>EXCEPT</u>

a. Crystal arthritis.
b. Trauma.
c. Bacterial infection.
d. Rheumatoid arthritis.

44- One of the following suggests a mechanical rather than inflammatory cause of back pain :

a. Back pain and stiffness exacerbated by resting.
b. +ve rheumatoid factor.
c. Gradual mode of onset in an elderly patient.
d. Radiation of pain down the back of one leg to the ankle.

45- The typical features of rheumatoid arthritis include :

a. Onset usually before the age of 30 years.
b. Male to female ratio of 3 : 1
c. Sparing of joints of the pelvic and shoulder girdle.
d. Association with HLA-DR4

46- Typical features of active rheumatoid arthritis include :

a. Fever and weight loss.
b. Macrocytic anemia.
c. Anterior uveitis.
d. Thrombocytopenia.

47- The following statements about rheumatoid arthritis are true <u>EXCEPT</u> :

a. joint pain and stiffness is typically aggravated by rest.
b. the rheumatoid factor test is positive in about 70% of patients.
c. joint involvement is additive rather than flitting.
d. associated scleromalacia typically produce painful red eyes.

48- Diseases associated with seronegative spondylopathy include <u>EXCEPT</u> :

a. Still disease.
b. Whipple's disease.
c. Sjogran's disease.
d. Behcet's disease.

49 - Overdoses of salicylates lead to all of the following <u>EXCEPT</u> :

a. Nausea and vomiting.
b. Tinnitus.
c. Marked hyperventilation.
d. Increase in blood PH.

50 - Highest incidence of rheumatoid factor is found in

a. SLE
b. Rheumatoid arthritis
c. Sjogren's syndrome
d. Progressive systemic sclerosis.

Answers

1- a
2- d
3- d
4- d
5- b
6- c
7- c
8- a
9- c
10- b
11- c
12- b
13- c
14- a
15- c
16- a
17- d
18- b
19- b
20- a
21- d
22- d
23- a
24- c
25- c
26- b
27- a
28- c
29- c
30- c
31- a
32- a
33- c
34- c
35- d
36- b
37- c
38- a
39- d
40- b
41- d
42- b
43- d
44- d
45- d
46- a
47- d
48- c
49- d
50- c